Note on the Problems in Dating the Mahabharata War

(a) War beginning: Mahābhārata V.142.18:

Saptamāccāpi divasādāmāvāsyair bhaviṣyati I
Saṃgrāmo yujjyatāṃ tasyām tāmāhuḥ Śakra-devatāṃ II

- Traditional interpretations place the beginning of the War on Jyeshta amavasya – this verse if I can believe my memory is from Krishna. When Krishna says that the war has to begin from the 7th day when amavasya falls on the day or nakshatra of Indra.

(b) 10th day of the war ended with the fall of Bhīṣma.

Mahābhārata Bhīṣmaparva, Ch.119.96-97, speaks of his wait for Uttarāyana on the Śaraśayya (bed of arrows). The following events must be specially noted:

- Gaṅgā, described as the daughter of Himavat sends Maharṣis in the form of *Hamsa*.
- In verse 105, Bhīṣma announces to the swans departing to the south that he will return to his original abode only with the advent of Uttarāyana.

(c) Break after the fall of Bhīṣma

Bhīṣmaparva, Ch.119.112-113:

Viṣādāśca ciramkālamatiṣṭan viśatendriyāh I
Dadhyamścaiva mahārājana yuddhedadhuremanaḥ II

Whether this can be interpreted to mean a break in the war has to be answered by the other astronomical events connected with the war.

(d) Balabhadra's return and the18th day war

Śalyaparva 33.5:

Catvārimśadahānyadya dve ca me niḥsṛtasyabhavai I
Puṣyeṇa saṃprayātosmi Śṛavaṇe punarāgataḥ I
Śiṣyayorvai gadāyuddhaṃ draṣṭukāmosmi Mādhava II

Balabhadra had set off for the pilgrimage on Puṣya nakṣatra and returned on the day of mace dual after 42 days on Śṛavaṇa nakṣatra. In this connection we may also note:

Śalyaparva 32.14:

Rouhiṇeyegate śūre puṣyeṇa Madhusūdanaḥ I
Pāṇḍaveyānpuraskṛtya yayāvabhimukhaḥ kurūn II

After the departure of Balarāma under puṣya, Madhusūdana in favor of the Pāṇḍavas proceeded against the Kauravas. Both the above verses together may mean that Kṛṣṇa and Balabhadra left Dvārakā on the same day of Puṣya.

(e) Bhīṣma's death, Śānti parvaḥ:

Nivṛttamātretvayane uttarevai Divākare I
Samāveśayadātmānamātmanyeva samāhitaḥ II 47.3 II

Śukḷapkṣasyacāṣṭamyāṃ māghamāsasya Pārṭhiva I
Pṛājāpatye ca nakṣatre madhyaṃ prāpte Divākare II 47.64 II

Anuśāsna parvaḥ:

Āganthavyaṃ ca bhavatā samaye mama Pārṭhiva I
Vinivṛtte Dinakare pṛvṛttecottarāyaṇe II 152.10 II

Aṣṭapaňcāśataṃ rātryaḥ śayānasyādya me gatāḥ I
Śareṣu niśitāgreṣu yatḥā varṣa śataṃ tatḥā II 153.27 II

Māgho yaṃ samanuprāpto māsaḥ puṇyo Yudḥiṣṭiraḥ I
Tribhāgaśeṣaḥ pakṣo yaṃ śukḷobhavitumarhati II 153.28 II

These verses without any ambiguity[19] convey the fact that Bhīṣma's death took place 58 nights after his fall on the 10th day of the war. The new moon referred to by Kṛṣṇa and the beginning of the war as such was 68 days before the winter solstice. All other details are secondary and of less significance and are prone to errors, additions/omissions, having passed through the imagination of innumerable people in describing a catastrophic war with all possible exaggerations. Thus the most cardinal of astronomical indications relating to the date of the war that can be gleaned from the text are:

- *War began on an Amāvāsya falling over Antares, 68 days before the winter solstice. (Or, if we accept the statement credited to Kṛṣṇa the number of intervening days =66)*
- *Bhīṣma fell on the 10th day of war*
- *Bhīṣma was on the bed of arrows for 58 days before the winter solstice*
- *Śṛavaṇa nakṣatra prevailed on the 18th day of war*
- *Round about this time there was a lunar eclipse followed by a solar eclipse visible at Kurukṣetra.*

[19] Only exception is the Kṛṣṇa's statement in Śānti parvaḥ 51.14:
Paňcāśataṃ ṣaṭca Kurupravīra, Śeṣaṃ dinānāṃ tava Jīvitasya I
Tataḥ śubhaiḥ karmaphalodayaistvaṃ sameṣyase Bhīṣma vimucya dehaṃ II
According to this verse, Kṛṣṇa tells Bhīṣma that you have now only 56 days more to live, and as such, the war had its beginning 66 days before the winter solstice.

Process of Dating –

- How is that the various scholars are able to date a single event differently from a set of astronomical data? Either the data may not be that deterministic as it should be– as for example may be a humbug arising out of different epochs -or the statements containing the data may be confusing or cryptic and allows for being interpreted differently. A glance over the different dating-exercises such as Sengupta, Raghavan etc is reflective of the cardinal aspects that guided them and the factors they omitted conveniently vis-à-vis the limitations of their methods.

- Prof. Sengupta was no mean scholar as to have failed in dating a few verses of the Mahabharata's astronomical references. Let's not forget this and appreciate the intricacy involved. As compared to many other scholars who have drawn only a partial picture of the epic astronomical references, Prof. Sengupta has given the facts as it is. We have every right to differ from his interpretations and he has given a wholesome account to facilitate that.

- Prof. Raghavan's school as I understand is the one that advocates the Adi Sankaracharya as belonging to 5th century BC, and Saka era of Varaha and Bhaskara-II as the Cyrus era etc. It's a school that falsely dated Varahamihira, Bhaskara-II and the Saka era and with 3067BC dating too they have not placed facts as they are.

- *Scholars did not give sufficient cognizance for the fact the 'War-diary' commencing with the new moon (interpreted to have coincided with Antares) and ending at the winter solstice is a 'T-shirt' like celestial phenomena that matches with many epochs in the absence of the clinching eclipse records. As such in the absence of an accurate software no one could have determined the date of the Bhārata War correctly, albeit some extra stroke of good luck*.

- Thirdly, Indian chronology as extant today is absurd due to the incomprehensible expanse of the Yugas. Daftari had done admirable work half-a-century ago, but no body had followed it up to achieve a sufficient definition for the periods such as Kalpa, Yuga etc.

Prof. Achar's Support for Prof. Raghavan's Dating
[http://www.hindunet.org/saraswati/colloquium/narahari01.htm]

1. Data provided by Prof. Achar is misleading to many who are not familiar with the planetarium simulations. Take for example, the lunar eclipse he has stated on 29 September 3067 BCE. I am unable to understand as to how the picture 14 given by him shows that there was a lunar eclipse on that day. I hope he will explain the matter.

2. With solar eclipse of October 14: SkyMap pro doesn't give eclipse data beyond 2000 BCE as their algorithms are not valid for eclipse computations of 3000 BCE. But still the sun-moon data suggests the possibility of an eclipse on the said date. Photo given by him is again misleading –it appears as if the eclipse was annular and that is not correct. The photo given by Prof. Achar is no proof for that and establishes nothing. Prof. Raghavan could never have ascertained the occurrence of eclipses around 3000 BCE as the solar and lunar theories of his time were not accurate for the purpose.

3. Professor says: "as seen in the figures…" - how the lunar eclipse is shown in the figure? An year back or so when he published a paper in the Indian Journal of History of Science,

Professor had published a picture of the **day time sky** (Sun at winter solstice on Dhanishtha) as observed by Vedic Indians. Why these scholars can't give the precise data?

4. These are the kinds of astronomical works done by Prof. Raghavan also. It's here great men like Prof. Sengupta and Daftari differs from these researchers – they have never placed any astronomical blunders before the society. They were masters of the astronomical science of their day and worked like scientists.

Conflicting References of the Epic:

1. With Antares at 225 degree (approx. sidereal) 225+68 = 293 is the position of winter solstice and Sun at solstice and Sukla (8) can lead the Moon only up to 29 degrees (293+96 (max limit for 8^{th} tithi) =389) – on the west of Rohini by 11 degrees.

2. On January 17, 3066 BCE, Sun was four degree ahead of the solstice. Prof. Achar has conveniently forgotten this discrepancy.

3. Without misinterpreting the beginning of war, the war diary of the epic cannot be fitted with any epoch as the astronomical data of the epic belongs to different epochs.

4. Balrama's pilgrimage across Pushya and Sravana can never be reconciled without manipulating the war beginning. It is a data that got incorporated around 964 BCE when both the epics underwent redaction. This is reflected in the Pushya epochs of both the epics (Pushya parva of Mbh and Rama's (Sun at solstice) coronation on Pushya) – when summer solstice was on Pushya and winter on Sravana.

It's surprising that Prof. Achar who has found fault with Prof. Sengupta has not found fault with Prof. Raghavan.

Both Mahabharata and Ramayana consist of astronomical myths of different epochs compiled/redacted at different epochs/grown over the ages to the present day form. Legends of Solar and Lunar dynasty can mean what else?

- See that it was the sun and moon who founded the dynasties that have become popular in the Epics.

- Kuru-vaṃśa had its orgin from 'Chhāya' who gave birth to 'Tapati' who is popular as a river or celestial stream. From Tapati → Saṃvaraṇa →Kuru →Pratīpa → Śantanu, who married the celestial Ganges and thus Bhīṣma, was born.

- If we examine the ancestry of Satyavati, there also her father Uparicara Vasu – the king of Chedi is of celestial origin and he governed the country by remaining onboard his Vimāna.

- Have a look at the progenitors of the Pāṇḍavas: Yama, Vāyu, Indra, Aśvinis. Can we imagine that Kṛṣṇadvaipāyana Vyāsa could have allowed so much of imagination in writing out the Itihāsa of his times? A look into the epic throws many such odd terminologies before us that won't make any sense in an earthly context.

- Birth of almost all characters like Karṇa, Pāñcālī, Dhṛṣṭadyumna, Dṛoṇa etc., do not allow the possibility of being historical personages. If we accept the epic characters as historical

Personages, then we will have to do so with Viṣṇu having his abode over the Milky Way and others like Kaśyapa, Aditi, Rudra, Durga etc.

- *Lastly, how can the Avtars of Viṣṇu be considered as historical personages without ascertaining the basis of the chronology attached to them?*

- Endless instances can be quoted to illustrate that the major episodes of Mahābhārata are not compatible with the happenings of an earthly world and as such the characters do not represent the historical personages. All the characters are of astronomical attributes and the language of the epic is allegorical. It contains history in terms of astronomical epochs couched under mythology which have become cryptic due to loss of the relevant information in the scores of centuries that have passed since the original conception and the paradigm shifts that have occurred in human thinking and living conditions.

- Before concluding, I would like to add here that the history written by some people and sponsored by certain Sankara Pithas on the so-called astronomical grounds of a spurious horoscope is a fraudulent one.

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